

Voice Problems in Entertainers

HANS von LEDEN, MD, Los Angeles

The medical care of entertainers is an art as well as a science; it demands both clinical experience and empathy—an appreciation of the special problems facing the performer. The expansion of our diagnostic acumen with audiovisual equipment and function studies, the addition of new medications and the development of microsurgery and laser surgery have improved the care of the professional voice user. Preventing voice problems by vocal hygiene remains the principal challenge.

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In any patient or group of patients, symptoms threatening their occupation or livelihood give rise to special concern. In professional voice users, even the slightest change in the voice may create panic. This worry applies particularly to singers and actors who depend on perfect vocal function for their success. There is an infinite variety of intralaryngeal and extralaryngeal adjustments—neurological, muscular and cartilaginous—all of which must be fine tuned to achieve artistic success.

By nature, entertainers are sensitive and excitable and easy prey to their emotions. These qualities make them successful entertainers, for no audience would pay the price of admission to hear dull, colorless or phlegmatic performers. At the same time, I have found entertainers to be cooperative, warm, grateful and courageous—and determined to do their job.

From their physicians they need moral support, understanding and the assurance that their vocal organ will not fail them in their hour of need. Place yourself in the position of a prominent singer who is scheduled before an important audience that night: The critics wait in the front row for the first sign of hesitation and seize upon the first flat note to discredit the singer in tomorrow's newspapers.

While other entertainers—pianists, violinists, flutists or drummers—rely on a previously tuned instrument, the singer appears on stage all alone. He or she is expected to produce a miraculous sound of exactly the correct pitch, the correct intensity and the correct quality without the benefit of an outside aid. The only instrument is a pair of vocal folds less than an inch in length and subject to all forms of infirmity. Is it any wonder that stage fright is common among vocal professionals?

Entertainers have the right to expect sympathy from their physicians and an appreciation of their special problems. It is

of no help to offer an appointment two days hence to a performer who is scheduled to sing "Carmen" or "Don Giovanni" that evening. Nor is it reassuring if the physician examines only the throat without listening to the patient's voice. The highest notes of the vocal range are usually the first to be affected and the clarity of these notes is reassuring to both physician and patient.

An examination of the singer and actor should begin with a searching history by the physician. No entertainer will volunteer the information that he or she is suffering from stage fright; instead, concern will be couched in a professional code. An experienced examiner will recognize these signs without embarrassing the patient.

A brief evaluation of the general health and a thorough examination of the upper aerodigestive tract and the larynx provide the desired information about the presence of organic disease. An acute inflammation or laryngitis, which is often part of an upper respiratory tract infection, should react well to conservative treatment—voice rest, humidification, decongestants, lubricants, fluids and the avoidance of irritants.

Voice rest prevents further injury of the inflamed structures. Decongestants reduce the swelling of the nose and paranasal sinuses and control the irritating postnasal discharge. A humidifier of cool air with or without aromatic additives is the most effective agent for soothing inflamed tissues; in an emergency, however, even a teakettle provides the desired humidification. Pastilles or lozenges lubricate the throat and provide both subjective and objective relief. An aromatic spray, such as Larylgan (a combination product containing antipyrine, pyrilamine maleate, sodium caprylate, menthol and other aromatics), is also helpful in easing the discomfort and in relieving the dryness that accompanies an entertainer's anxiety.

Fluids and other supportive measures tend to improve the

From the University of Southern California and The Institute of Laryngology and Voice Disorders, Los Angeles.

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Reprint requests to Hans von Leden, MD, ScD, Medical Director, Institute of Laryngology and Voice Disorders, Inc, 10921 Wilshire Blvd, Los Angeles, CA 90024.

general condition. Hot tea with honey or lemon has been a favorite of singers and actors for generations. It goes without saying that such irritants as smoking, concentrated alcohol and highly spiced foods are prohibited. The use of antihistamines and tranquilizers should be avoided because they dry out the mucous lining of the throat and cause drowsiness.

In an acute emergency, the intramuscular administration of a rapidly acting corticosteroid, such as Celestone Soluspan (a combination product containing betamethasone sodium phosphate and betamethasone acetate) or methylprednisolone acetate is helpful in reducing the inflammation of the vocal organ. While the vocal result may not be aesthetically perfect, a singer or actor with a mild or moderate inflammation of the larynx can usually be readied for a single performance by conservative treatment, relaxation exercises and moral support.

A word about voice rest. Gone are the days when entertainers were tortured with prescriptions of complete voice rest for a period of three to six months. Our investigations have shown that the vocalis muscle begins to atrophy after two or three weeks of disuse, and therefore complete silence should be limited to a few days. Entertainers must be impressed that a stage whisper is more harmful than full voice because it necessitates forceful closure of the membranous vocal cords. Only the cartilaginous posterior third of the cords remain open during a whisper. From the standpoint of vocal hygiene, the gentlest type of phonation is a soft, breathy voice.

Among acute voice problems, hemorrhage into the larynx is an absolute contraindication to the professional use of the voice. While this condition may occur after any vocal abuse, it is most commonly seen in actors or singers during or after a vocally demanding performance. Hemorrhage of the vocal cords is one condition that demands absolute voice rest to control the bleeding and prevent a recurrence. Corticosteroids may aid in the absorption of the collected blood and in preventing the formation of a persistent hematoma.

Entertainers with local ulcerations or tumefactions should also be discouraged from professional voice use. Exceptions to this prohibition are the so-called vocal nodules that arise at the junctions of the anterior and middle thirds of the vocal cords as the result of excessive or faulty use. While a large, firm nodule may completely incapacitate a performer, a small, soft lesion may prove only a temporary handicap.

In this connection, I would like to emphasize that vocal nodules are often misdiagnosed. A small collection of mucus on the free margin of the vocal cord or a prominent vocal process may mislead an inexperienced examiner into diagnosing vocal nodules. Many singers or actors present a swelling in this location after a strenuous performance because the impact of the approximation is greatest in this area; by the following morning these so-called nodules have often disappeared. Because the term "nodule" has frightening connotations for a vocal artist, its use should be avoided whenever possible. Treatment of early vocal nodules should be conservative and consist of vocal temperance and reeducation; surgical treatment should be reserved for fibrotic nodules that prove resistant to conservative measures.

Vocal problems of longer duration deserve the attention of an experienced laryngologist who has access to current diagnostic methods and instrumentation. Magnification during indirect laryngoscopy often shows minor irregularities of the

vocal fold margins; a fiber-optic or telescopic examination affords additional information about the activities of the larynx during phonation; stroboscopy presents valuable data on vibratory excursions and approximation of the two vocal cords, and laryngeal function studies measure the efficiency of the laryngeal structures in organic diseases and functional disorders of the larynx. Audiovisual techniques permit patients to view their own larynx on a television screen and are valuable for comparative studies over a period of time.

Of special interest to a primary physician should be the effects of endocrine changes on the voice. Most women have changes in vocal pitch and clarity before and during menstruation, when the tissues of the larynx tend to swell. Opera companies in several European countries recognize this well-known phenomenon by an exclusionary clause in artists' contracts. Pregnancy also affects the singing voice—usually favorably—until the size of the fetus interferes with the normal breathing process.

Prolonged use of birth-control pills may decrease the vocal range; this medication should be discontinued as soon as an entertainer notices a progressive change in her high notes. Anabolic drugs and all medications containing progesterone must be used with extreme caution in singers, for the masculinizing effects of these drugs are usually irreversible.

Contemporary life places a heavy strain on performers. Their vocal system is expected to adapt to the jet lag of air travel and extensive climatic changes and to perform without adequate time for rest and adjustment. Physicians can be of great help to their artist patients by counseling reasonable periods of preparation and relaxation between engagements.

Above all, performing artists should be cautioned against exerting their voices in the presence of ambient noise—during air travel, automobile trips and at noisy receptions and restaurants. Cooperation with singing teachers and voice coaches is helpful in this regard.

By contrast, many rock singers have never had a voice lesson and consequently abuse their voices unmercifully. Compared with the cooperative traditional performer, they are often rebellious and do not follow the advice of their physicians. Under these circumstances, their vocal careers are often short-lived. The human vocal organ was not designed to compete with electronic instruments, and in many cases the singers need to scream just to monitor their own voices.

The promiscuous use of cigarettes and hard drugs, common to the rock culture, further injures the delicate structures of the larynx. Marijuana smoking may cause erythema and ulcerations of the vocal epithelium, with a loss of the upper range. Cocaine sniffing usually affects the nasal mucous membranes, but the more recent habit of smoking this irritating substance can also affect the larynx. The stronger the drug, the more likely the damage!

Both otolaryngologists and primary physicians should also be concerned about the effect of surgical intervention on the voices of entertainers. For all surgical cases, an anesthesiologist should be chosen with special care, for damage to the delicate laryngeal structures during insertion of an endotracheal tube or prolonged general anesthesia may affect the quality of the voice. The indications for tonsillectomy should be reviewed carefully before counseling such a procedure in a professional singer. If the tonsils require removal, meticulous

care should be given to preserving the muscular pillars and the surrounding mucous membranes; preserving the inferior pole avoids scarring and adhesions in the glottic sulcus.

It is not generally recognized that a thyroidectomy may damage the voice even when the inferior laryngeal nerve is preserved. In professional singers, I have made it a rule to retract the sternomastoid and strap muscles of the lower neck during a thyroid operation, because dividing and subsequently approximating them often result in a decrease of the vocal range for periods of months or years. In this age of litigation, surgeons should remember that a singer may blame the operator if his or her subsequent singing career is not successful.

On the other hand, recent advances in laryngeal equipment and techniques have revolutionized the scope of laryngeal surgical procedures for preserving and improving the voice. Microsurgery of the larynx permits precise excision of the smallest lesion of the laryngeal interior. With microsurgery, an entertainer can rest assured that a scirrhous nodule or a polyp can be removed without damage to essential structures. The application of the carbon dioxide laser by experienced

operators for certain surgical procedures can further diminish the incidence of permanent injury to the vocal cords and subsequent changes in voice.

Despite these great new opportunities, an ounce of prevention is still worth a pound of cure. The principal challenge to voice care in entertainers remains the *prevention* of voice problems by good vocal hygiene. As the Roman orator Quintilian observed almost 2,000 years ago, good habits, adequate rest and good nutrition are the key to vocal health.

The medical care of entertainers is an art as well as a science—an art that primary physicians should share. A healthy voice presumes good physical and mental health, for the voice is truly a “mirror of the soul.” Because the artistic production of voice is multifaceted and involves organic, functional and emotional components, it is both challenging and rewarding to provide medical care for entertainers. This spunky lot dares to excel in a society where mediocrity is the easy choice. I have always considered it a privilege to deal with creative artists, who are determined to play their part: *The show must go on!*

Medical Practice Question

EDITOR'S NOTE: From time to time medical practice questions from organizations with a legitimate interest in the information are referred to the Scientific Board by the Quality Care Review Commission of the California Medical Association. The opinions offered are based on training, experience and literature reviewed by specialists. These opinions are, however, informational only and should not be interpreted as directives, instructions or policy statements.

Magnetic Resonance Imaging

QUESTION:

Is magnetic resonance imaging considered accepted medical practice?

OPINION:

In the opinion of the Scientific Advisory Panel on Radiology, magnetic resonance imaging (MRI) has moved beyond the investigational stage and its use is now considered established medical practice. This diagnostic tool is of exceptional value in imaging such anatomical areas as the brain, spine, heart, mediastinum, pelvis, joints and renal transplants. When indicated, MRI may be the physician's primary study of choice and it need not be preceded by any other diagnostic study.

MRI is rapidly evolving and the advisory panel acknowledges that further controlled clinical investigations are required to determine the full usefulness of this technology.